Gulf of Mexico Harmful Algal Bloom Bulletin

27 July 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: July 24, 2006

Conditions Report

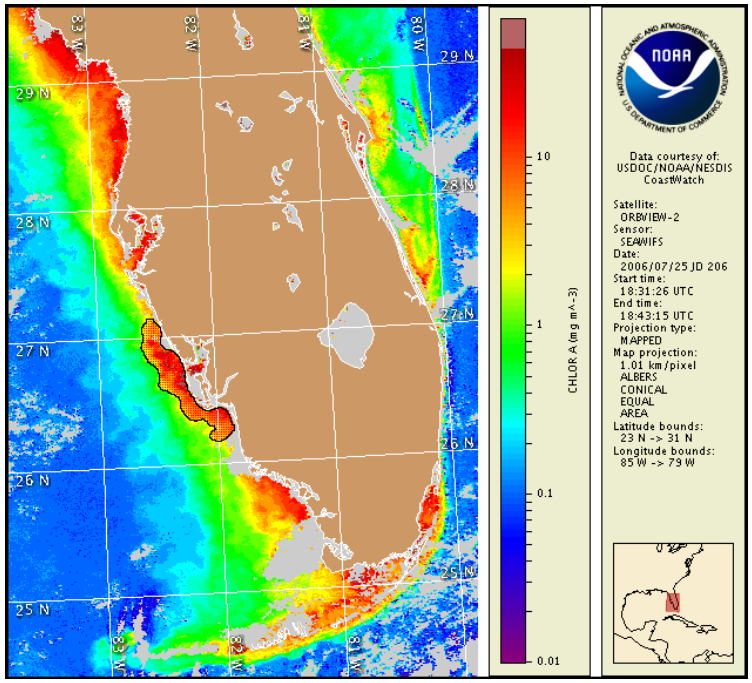
A harmful algal bloom has been identified from southern Sarasota to northern Collier County. Patchy moderate to high impacts are possible from southern Sarasota to northern Lee County this afternoon, with low impacts expected Friday through Monday. No impacts expected along the coast from southern Lee to northern Collier County through Monday. Patchy low to moderate impacts possible along bay shores in the Pine Island Sound region through Monday.

Analysis

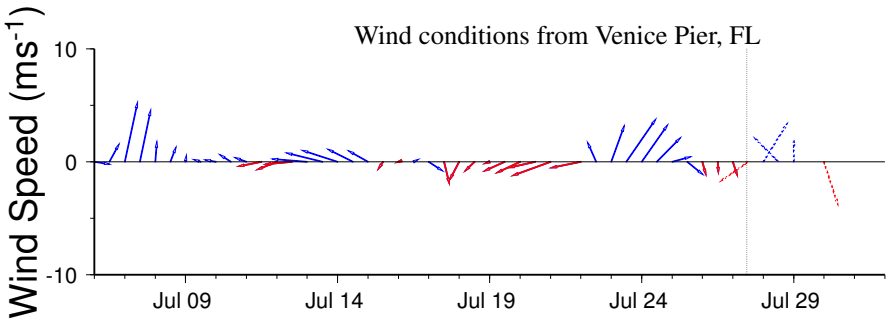
The harmful algal bloom persists in Lee and northern Collier Counties and has moved out of the Lee County bay regions and north into Charlotte and southern Sarasota Counties. Satellite imagery from July 25 indicates that the bloom extends in a band 5-10 NM wide from 27°1.7'N 82°33.9'W to 26°22.6'N 82°12.8'W along its north-south axis and west from Boca Grande Pass to 82°30'W. A maximum chlorophyll value (>50μg/L) was detected at 26°38.7'N 82°19.2'W. Elevated chlorophyll levels extend as far north as 27°17'N 82°36'W, near Siesta Key. No recent samples are available for mid to northern Sarasota County; sampling is highly recommended. High concentrations of *K. brevis* have been identified 5 NM west of Stumps Pass and Gasparilla Pass, with medium concentrations subsurface at both offshore locations, and onshore at the surface (FWRI, 7/25). High concentrations of *K. brevis* were identified at the surface 1 NM west of Captiva Island, with medium concentrations at depth. The presence of *K. brevis* below the surface provides potential for significant intensification with the upwelling-favorable conditions forecast for this weekend. Offshore winds through the weekend will likely minimize onshore transport and beach impacts. Continued northerly transport of the bloom is likely through the weekend.

The Pine Island Sound region has been obscured by clouds and no recent samples are available. *K. brevis* was not present in most samples from southern Sanibel Island to Marco Island, but reports of respiratory irritation have been received in southern Lee County (FWRI, 7/24). Chlorophyll levels remain elevated offshore southwest of Fort Myers. A maximum chlorophyll value (>15μg/L) was detected via satellite imagery at 26° 24.1'N 81° 56.9'W. Offshore winds through Monday should minimize onshore transport and coastal impacts in this region.

- Allen, Urizar, Fisher

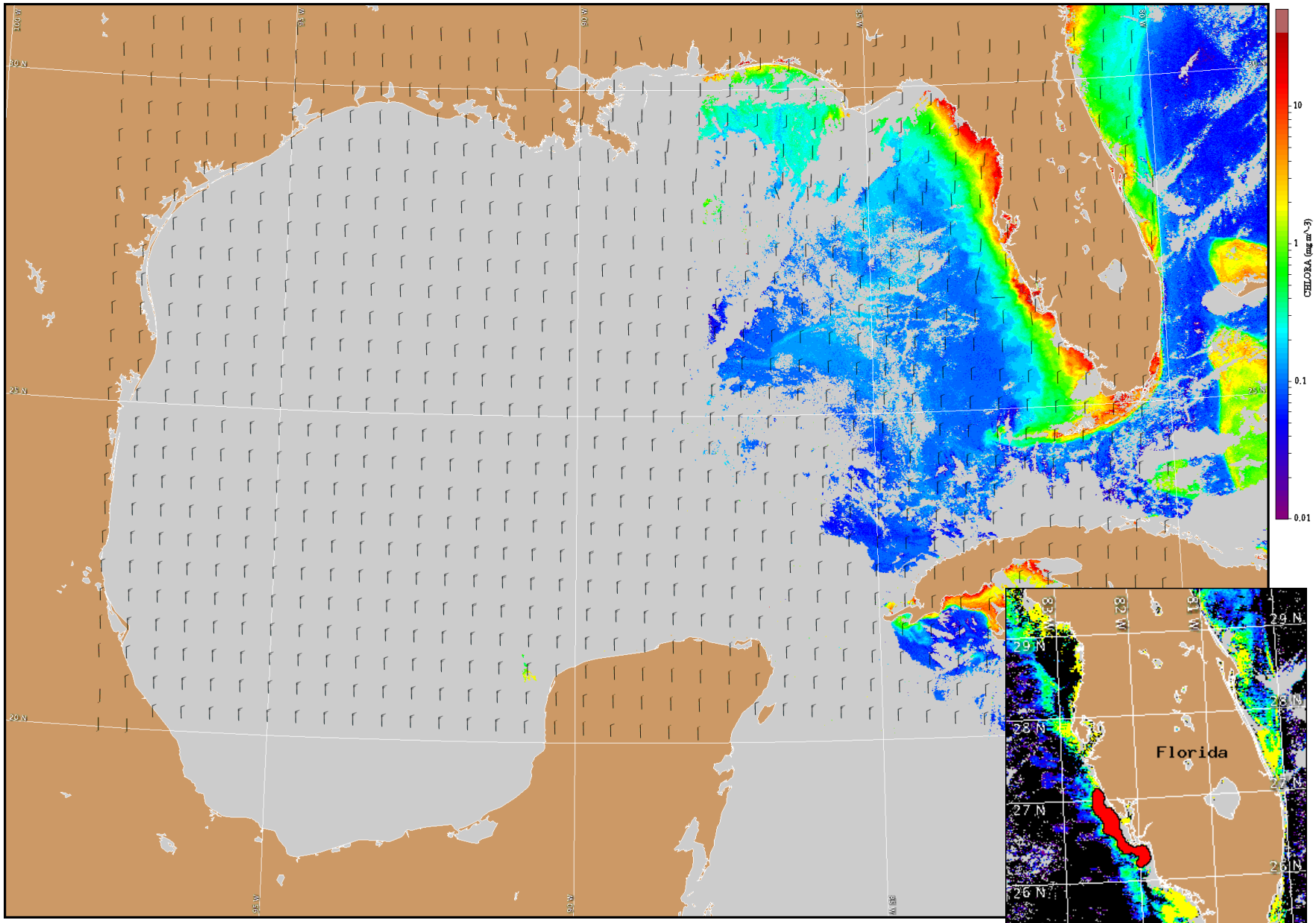


Satellite chlorophyll image with possible HAB areas shown by red polygon(s).

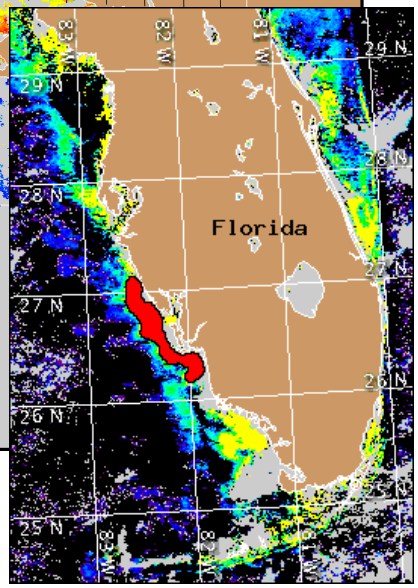


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Easterly winds today at 5-10 knots (3-5 m/s) with an afternoon seabreeze. Easterly winds increasing to 10-15 knots (5-8 m/s) Friday, shifting to the southeast Saturday through Monday.



Satellite chlorophyll image and forecast winds for July 28, 2006 06Z.



Verifi ed HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).